

Technical Specification

Pre-connectorized Fiber Optic Cable Distribution Box

MINIBOX68-12

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1. General

1.1 Description

Pre-connectorized optical distribution box as the most advanced FTTX network distribution node equipment, provide quick and reliable connection, good protection and management for the FTTX network.

Production type	Classification
MINIBOX68-12 series	Pre-connectorized fiber optic cable distribution box



Appearance of MINIBOX68-12



Appearance of MINIBOX68-12 -1



Appearance of MINIBOX68-12 -2

1.2 Standards Comply

The production offered by FIBRAMERICA are designed, manufactured and tested according to the standards as follows:

ITU-T G.652	Characteristics of a single-mode optical fibre
IEC 60794-1-1	Optical fibre cables-part 1-1: Generic specification-General
IEC 60794-1-2	Optical fibre cables-part 1-2: Generic specification-Basic optical cable test procedure

1.3 Applications Environment

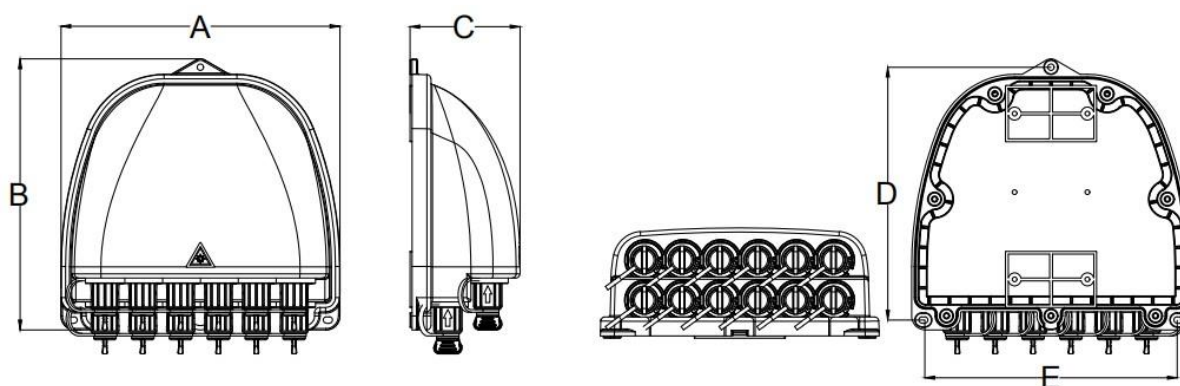
Item	Value
Operation temperature	-40 °C~+65 °C
Installation temperature	-5 °C~+40 °C
Storage temperature	-40°C~+65 °C
Atmospheric pressure	70~106Kpa
Relative humidity	≤93%(+40°C)

2. Characteristics

- 2.1. The bottom shell and the upper cover are fixed with screws, removable.
- 2.2. Material: PP.
- 2.3. Moisture proof, waterproof, dust-proof, anti-aging.
- 2.4. Protection level up to IP68.
- 2.5. The interior is equipped with 1x4 PLC splitter+ 1x8 PLC splitter or 1x8 PLC splitter.....
- 2.6. Installation method: pole-mounted, aerial-mounted, wall-mounted.
- 2.7. It can be equipped with drop cable storage tray to meet the storage of 30 meters 5mm round cable.

3. Specifications

3.1 Mechanical specifications



Item	Specifications	Remark
Material of housing	Modified PP plastic or PC+ABS	
Material of internal components	PC+ABS/ABS	
Material of metal accessory	High-quality stainless steel	
External dimension(mm)	199*193*78.5mm	A*B*C
Color	Black	
Installation hole position(mm)	180*180	D*E
Number of Pre-connectorized adaptors	12	MINIBOX68-12(1 red,3green,8 black)
	9	MINIBOX68-12(1 red,8 black)
	10	MINIBOX68-12-2(1red,1blue,8 black)
Splitter	1x4 PLC splitter+ 1x8 PLC splitter	MINIBOX68-12
	1x8 PLC splitter	MINIBOX68-12
	1x2 PLC splitter+ 1x8 PLC splitter	MINIBOX68-12-2
	1x2 FTB splitter+ 1x8 PLC splitter	
IP grade	IP68	
Flammability	UL94-HB	Default
Neutral salt spray test (NSS)	48h	

3.2 Optical specifications

Model	Splitter	IL (dB)		RL (dB)	IL (dB)	Test method
		Splitter			Distribution box	
MINIBOX68-12-S4S8	1x4 PLC + 1x8 PLC Splitter, with SCAPC connector	1x 4 PLC	≤ 7.4	≥ 55	≤ 7.6	IL: IEC61300-3-4 Method B RL: IEC61300-3-6 Method 1
		1x4 PLC + 1x8 PLC	≤ 17.9	≥ 55	≤ 18.1	
MINIBOX68-12-S8	1x 8 PLC Splitter, with SCAPC connector	1x8 PLC	≤ 10.5	≥ 55	≤ 10.7	
MINIBOX68-12-S2S8PL	1x2 PLC + 1x8 PLC Splitter, with SCAPC connector	1x2 PLC	≤ 4.0	≥ 55	≤ 4.2	
		1x2 PLC + 1x8 PLC	≤ 14.5	≥ 55	≤ 14.7	
MINIBOX68-12-S2-F9/1-S8	1x2 FTB (90/10) + 1x 8 PLC Splitter, with SCAPC connector	1x2 FTB (90%)	≤ 0.83	≥ 55	≤ 1.03	
		1x2 FTB (10%) + 1x8 PLC	≤ 21.7	≥ 55	≤ 21.9	
MINIBOX68-12-S2-F8.5/1.5-S8	1x2 FTB (85/15) + 1x 8 PLC Splitter, with SCAPC connector	1x2 FTB (85%)	≤ 1.0	≥ 55	≤ 1.2	
		1x2 FTB (15%) + 1x8 PLC	≤ 20.10	≥ 55	≤ 20.4	
MINIBOX68-12-S2-F8/2-S8	1x2 FTB (80/20) + 1x 8 PLC Splitter, with SCAPC connector	1x2 FTB (80%)	≤ 1.4	≥ 55	≤ 1.6	
		1x2 FTB (20%) + 1x8 PLC	≤ 18.3	≥ 55	≤ 18.5	
MINIBOX68-12-S2-F7/3-S8	1x2 FTB (70/30) + 1x 8 PLC Splitter, with SCAPC connector	1x2 FTB (70%)	≤ 2.1	≥ 55	≤ 2.3	
		1x2 FTB (30%) + 1x8 PLC	≤ 16.5	≥ 55	≤ 16.7	
MINIBOX68-12-S2-F6/4-S8	1x2 FTB (60/40) + 1x 8 PLC Splitter, with SCAPC connector	1x2 FTB (60%)	≤ 2.8	≥ 55	≤ 3.0	
		1x2 FTB (40%) + 1x8 PLC	≤ 15.2	≥ 55	≤ 15.4	
MINIBOX68-12-S2-F5/5-S8	1x2 FTB (50/50) + 1x 8 PLC Splitter, with SCAPC connector	1x2 FTB (50%)	≤ 3.8	≥ 55	≤ 4.0	
		1x2 FTB (50%) + 1x8 PLC	≤ 14.3	≥ 55	≤ 14.5	

The optical parameters shown in the table above are default values and can be customized according to requirements.

4.Product Picture

4.1 Product cable ways:



MINIBOX68-12-S4S8 (1 * 4 PLC + 1 * 8 PLC Splitter Cable Ways)



MINIBOX68-12-S8 (1 * 8 PLC Splitter Cable Ways)



MINIBOX68-12-S2-F7/3-S8 (1x2 FTB splitter+ 1x8 PLC splitter Cable Ways)

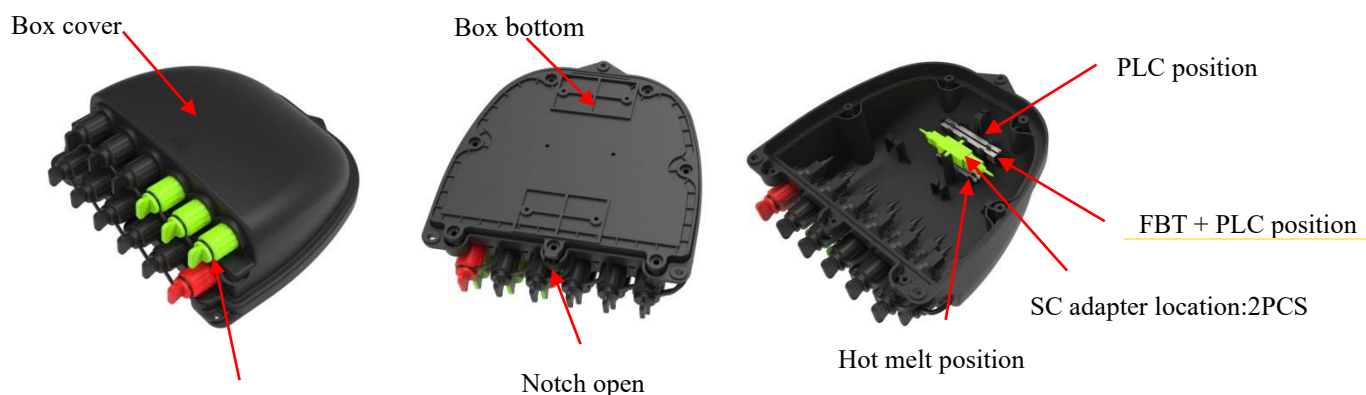


MINIBOX68-12-S2S8PL (1x2 PLC splitter+ 1x8 PLC splitter Cable Ways)

4.2 Configuration

4.2.1 Main parts

No.	Part name	Unit	Quantity	Remark
1	Box bottom	pcs	1	
2	Box cover	pcs	1	
3	Pre-connected adaptor	pcs	12	MINIBOX68-12
4		pcs	9	MINIBOX68-12
		pcs	10	MINIBOX68-12-2
5	Splitter1X4 PLC	pcs	1	Only installed in MINIBOX68-12
6	Splitter1x8 PLC	pcs	1	



Pre-connected adaptor

Structure

4.2.2 Accessories

No.	Part name	Reference picture	Unit	Quantity	Remark
1	Users' manual	/	pcs	1	EN
2	Splitter test report	/	pcs	1	EN
3	Wall-mounted kit		set	1	Optional as customer's request
4	Pole-mounted kit		set	1	Optional as customer's request
5	Aerial-mounted kit		set	1	Optional as customer's request

6	Drop cable storage tray A		set	2	Optional as customer's request
7	Drop cable storage tray B		set	1	Optional as customer's request

5.Environmental characteristics

This product complies with the RoHS environmental protection directive, and the content of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) does not exceed the limit.

6. Installation:

6.1. Wall-mounted installation

Drill 3 holes in the wall according to the dimension, place the expansion plug $\Phi 7.5 \times 40$, place the box to match up the holes and use screws to fasten.



Wall mounted installation

6.2. Pole-mounted installation

Pass the hoop ring through the slot of the back plate and fix it on the telecommunication pole



Pole mounted installation

6.3. The overhead structure

Tie the two installed on the chassis of the overhead hung on the wire, and then bolted, prevent the case fall off.(Pic 6)



Pole-mounted installation

6.4. Wall-mounted installation (With drop cable storage tray)

Drill 4 holes in the wall according to the dimension of the drop cable storage tray mounting hole, place the expansion plug $\Phi 7.5 * 40$, place the box to match up the holes, and fasten with the screws.



OR



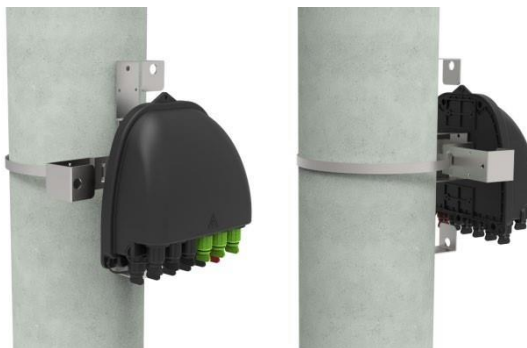
Wall-mounted installation (With drop cable storage tray)

6.5. Pole-mounted installation (With drop cable storage tray)

Pass the stainless steel belt through the slot of the drop cable storage tray and fix it on the pole with buckle.



OR



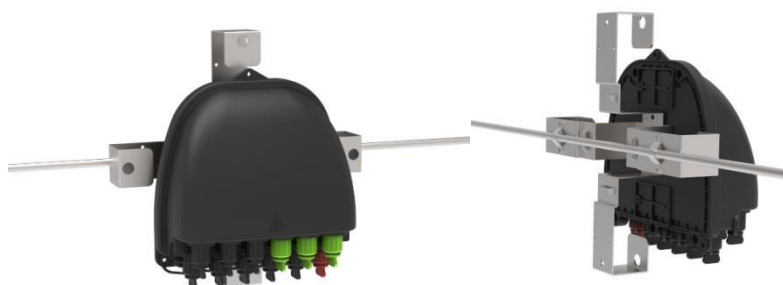
Pole-mounted installation (With drop cable storage tray)

6.6. Aerial-mounted installation (With drop cable storage tray)

Use the small metal plate to fix the distribution box to the messenger.



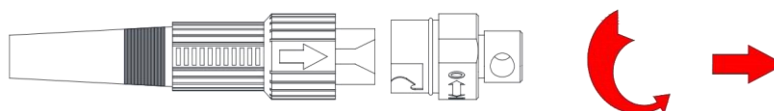
OR



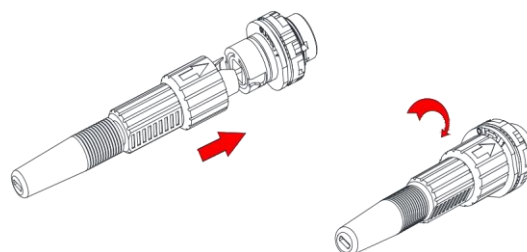
Aerial-mounted installation (With drop cable storage tray)

7. Connector operation

7.1 Pre-connected adapter - A (E)



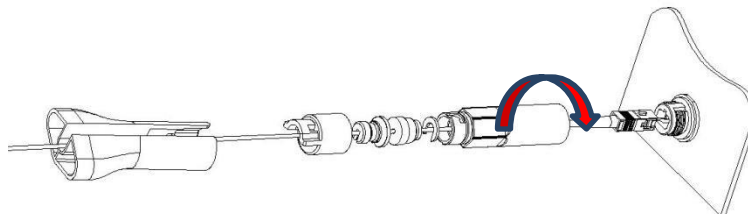
Rotate the arrow part of fiber connector counterclockwise and take out the dust cap.



The arrow part of fiber connector is above, insert fiber connector into the socket and then rotate the arrow part clockwise.

7.2 Pre-connected adapter - B (XL)

- Insert the SC optical fiber connector plug through the loose parts in turn, and then plug it into the adapter;
- Install XL pre connected adapter sheath on adapter with plastic key;
- Insert the plug of the snap spring into the sheath;
- The cable clamp shall be installed and the line shall be close to the plug;
- Screw the leather cable clamp seat cap on the sheath clockwise.



7.3 Pre-connected adapter - C

- Push the sliding ring on the optical fiber preformed plug in the direction of the arrow to remove the dust cap; press the button to take out the dust cap on the adapter in the direction of the arrow.



- Align the body of the preformed plug with the adapter buckle until it is fastened. Connect the two dust covers in the same way.



- The installed prefabricated plug pushes the sliding ring to release the buckle, and then pull the main body backward to separate it.

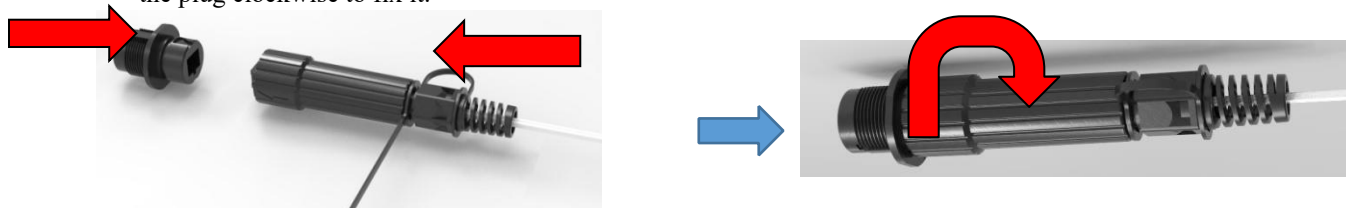


7.4 Pre-connected adapter - D

- Turn the pre connected plug anti clockwise and open the pre connected plug and dust cover in the direction of the arrow.

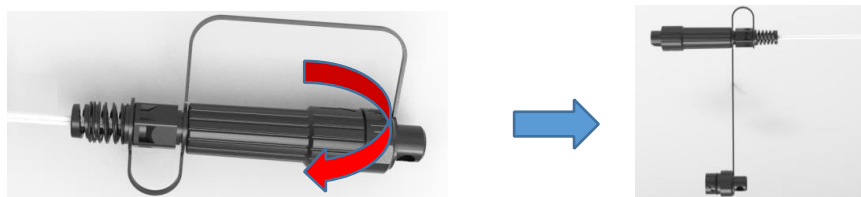


- Connect the pre connected plug D and the pre connected adapter D in the direction of the arrow, and rotate the plug clockwise to fix it.

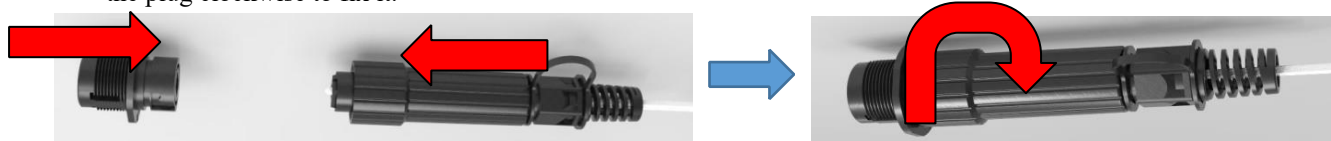


7.5 Pre-connected adapter - E (A)

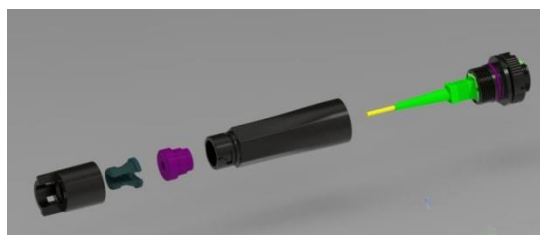
- Turn the pre connected plug anti clockwise and open the pre connected plug and dust cover in the direction of the arrow.



- Connect the pre connected plug E and the pre connected adapter E in the direction of the arrow, and rotate the plug clockwise to fix it.



7.6 Pre-connected adapter - SC



- Insert the SC optical fiber connector plug through the loose parts in turn, and then plug it into the adapter;
- Install XL pre connected adapter sheath on adapter with plastic key;
- Insert the plug of the snap spring into the sheath;
- The cable clamp shall be installed and the line shall be close to the plug;
- Screw the leather cable clamp seat cap on the sheath clockwise.

8. Package

Item	Material	Size(mm)	Quantity	Gross weight(kg)
Independent product packaging	Carton	215*205*85	1	0.8
Outer packaging carton	Carton	450*430*450	20	17
Note: Without drop cable storage tray				